

ABSTRACT

A rigid polyurethane foam is described which is preferably, while not exclusively, used for manufacturing composite building elements used in buildings or for manufacturing industrial constructions. The foam has a structure consisting of closed cells substantially free therein of optionally halogenated hydrocarbon foaming agents, having an adhesion strength to a supporting substrate, measured according to standards EN 1607, equal to or higher than 0.7 kg/cm<sup>2</sup>. The polyurethane foam may be obtained starting from at least one polyol and at least one isocyanate compound by using a water-based foaming agent entirely compatible with the strictest environmental requirements, and has good mechanical characteristics, characteristics of dimensional stability, characteristics of adhesion to a supporting substrate and, possibly, characteristics of fire resistance.